

W6LVP Amplified Receive-Only Magnetic Loop Antenna

Quick Start Guide

In order to get you receiving with the new antenna quickly, this Quick Start Guide will focus on using the antenna for receiving only. Detail instructions for setup and operation for receive and transmit can be found in the Setup and Operation Guide.

First, pick an antenna location and type of mounting. If the antenna is going to be used in a fixed location, it should be mounted as far from your house and other noise generating sources as possible. In addition, a light-weight rotator is highly recommended to orient the antenna for minimum noise pickup.



Blackmore Speaker Tripod
(Not fully extended)

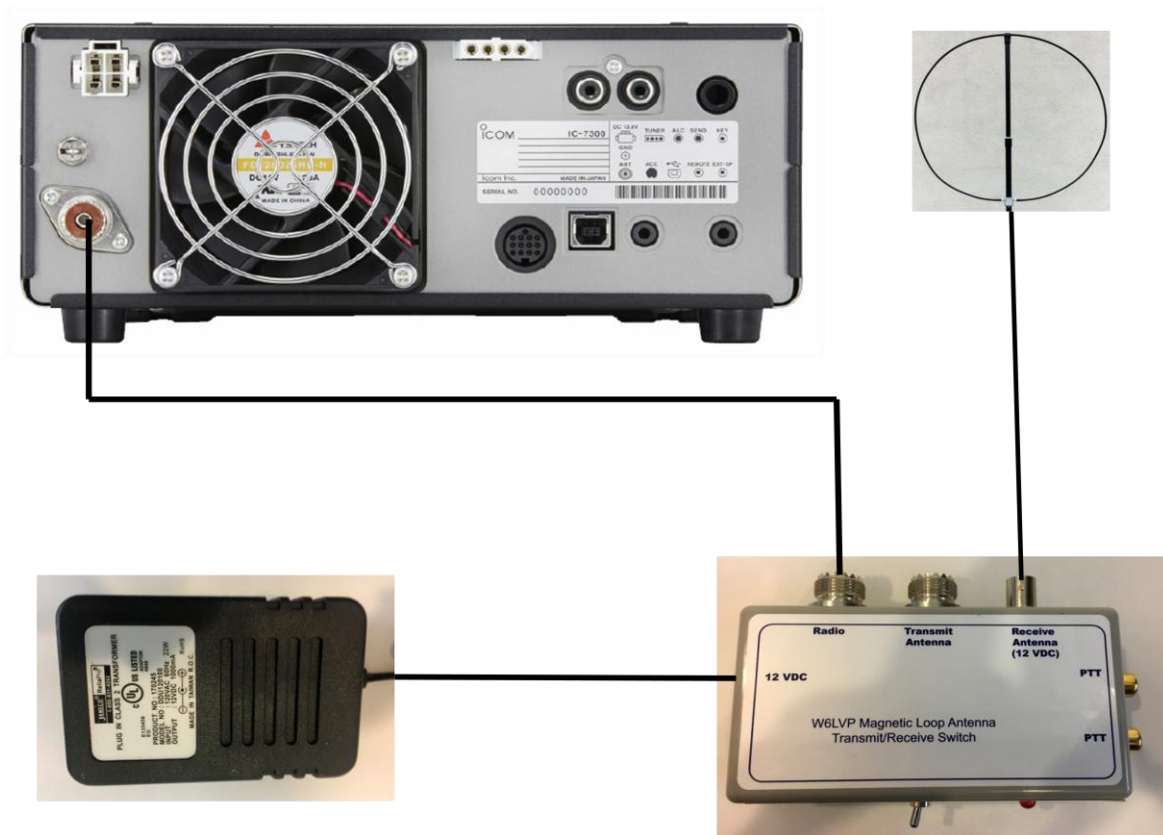


Channel Master TV Rotator

Assembly of the antenna is extremely straightforward. Insert the upper $\frac{3}{4}$ " PVC tube with coaxial cable loop attached into the top of the 1" PVC lower tube section. Connect the two BNC connectors on the ends of the coaxial cable loop to the BNC connectors on each side of the loop amplifier. Insert the lower 1" PVC tube into the top of a rotator, portable tripod, or other similar mounting arrangement. The coaxial cable loop can be adjusted to a round shape which has only cosmetic benefit. Slight deformation of the coaxial cable loop will not affect loop performance.

For portable operation, I use and recommend a Blackmore Model BJST-60KG DJ speaker support tripod that will raise the base of the antenna to a bit over 6 feet. The speaker tripod is sturdy, collapsible for portability, and accepts the antenna 1" PVC lower tube section. The tripod can be purchased from a variety of sources including Amazon for \$25. The internal diameter of the tripod tube may be too small to accept the lower antenna PVC tube. In that case, use a hacksaw to make two 3" long cuts in the lower antenna PVC tube running parallel the tube. Two cuts will make four total cuts in the PVC allowing the diameter to shrink slightly and fit inside the tripod upper tube.

- Connect a short 50-ohm cable with PL-259 connectors between the transceiver antenna connector or the receiver antenna connector and the RADIO connector on the transmit/receive switch.
- Using a 50-ohm coaxial cable with BNC connectors or other connectors and BNC adapters, connect the transmit/receive switch RECEIVE ANTENNA input to the loop amplifier output.
- Connect the 12 VDC power adapter and turn the transmit/receive switch power switch to ON. After a short delay, the RECEIVE LED will illuminate.
- Turning the antenna switch power off or removing its power source will disable the receive loop antenna.
- In this receive-only configuration, the red LED is a power indicator. Transmit/Receive Switch PTT and Transmit Antenna connections are not used.



NEVER CONNECT THE TRANSMIT/RECEIVE SWITCH RECEIVE ANTENNA CONNECTOR (BNC) TO THE TRANSCEIVER ANTENNA CONNECTOR OR THE TRANSCEIVER RECEIVE ANTENNA CONNECTOR. THE CABLE FROM THE TRANSMIT/RECEIVE SWITCH TO THE LOOP IS USED FOR BOTH THE RECEIVED RF SIGNAL FROM THE LOOP AMPLIFIER AND 12 VOLTS DC POWER FOR THE LOOP AMPLIFIER. THAT 12 VOLTS DC COULD DAMAGE THE INPUT TO A TRANSCEIVER OR RECEIVER.

NEVER CONNECT THE OUTPUT OF A TRANSCEIVER OR POWER AMPLIFIER TO THE MAGNETIC LOOP AMPLIFIER. THIS ANTENNA IS FOR RECEIVE ONLY.

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